ISHIZUKA et al. Application No. 10/765,892 July 10, 2008

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1-20 are pending in this application.

Rejection under 35 U.S.C. §112:

Claims 1-20 were rejected under 35 U.S.C §112 as allegedly being indefinite. Independent claims have been amended in accordance with the Examiner's helpful suggestion (namely, inclusion of "an injector control signal" in independent claims).

Rejection under 35 U.S.C. §103:

Claims 1-20 were rejected under 35 U.S.C. §103 as allegedly being obvious over Crofts et al (U.S. '533, hereinafter "Crofts"). Applicant traverses this rejection.

In order to establish a *prima facie* case of obviousness, all of the claim limitations must be taught or suggested by the prior art. Crofts fails to teach or suggest all of the claim limitations. For example, Crofts fails to teach or suggest "determining a multisided geometry defined by an actual change in injection rate of the injector with respect to time, the multisided geometry being determined based on a current pressure of the fuel supplied to the injector and a rising injection rate of the fuel which is previously measured and stored in the controller," as required by independent claim 1. Similar comments apply to the remaining independent claims.

A rising injection rate (Qup) varies due to individual characteristics of an injector. Through the above-noted limitation, the rising injection rate is previously measured with respect to an injector and is then stored in the controller. A multisided geometry of injection rate is determined based on the current pressure and the previously stored rising injection rate (Qup). The injection rate is therefore promptly obtained.

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In contrast, Crofts discloses a valve lift amount being detected to feed-back control in energizing timing and period. At least one fuel injection is necessary to perform such a feed-back control, which may cause a time delay of the control such that emission is deteriorated.

Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §103 be withdrawn.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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